

ZAKIYEV, Kh.Ya.

Snow line in the mountains. Trudy Tbil.NIGMI no.9:45-47 '61.
(MIRA 15:3)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Tseyu Glacier—Snow line)

ZAKIYEV, Kh.Ya.

Some characteristics of temperature distribution in the layer of air immediately above the glacier. Trudy Tbil.NIGMI no.9:136-138 '61.
(MIRA 15:3)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Tseyu Glacier--Atmospheric temperature)

ZAKIYEV, Kh.Ya.

Studying the glaciers of the Caucasus. Trudy Tbil.NIGMI no.9:190-
192 '61. (MIRA 15:3)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.
(Tseyra Glacier)

ZAKIYEV, Kh.Ya.

Effect of Tsymlyansk Reservoir on the weakening of dry winds in
the adjacent region. Uch. zap. RGU 44:223-224 '59. (MIRA 14:1)
(Tsymlyansk Reservoir region--Winds)

③ ZAKIYEV, Kh Ya

PHASE I BOOK EXPLANATION 807/566

Nauchnye konferentsii po problemam meteorologii Antarktiki, Moscow, 1959
Tsel' doklady (theses of reports) at the Scientific Conference on Meteorological Problems in Antarctica, Moscow, 1959) Moscow, Gidrometizdat (Gid-met) 1959. 87 p. 1,000 copies printed.

Ed.: O.G. Ershov; Tech. Ed.: I.M. Zakh.

REMARKS: The publication is intended for meteorologists, particularly for those interested in the climatology of Antarctica.

CONTENTS: This book contains summaries of thirty-five reports presented at the Scientific Conference on Meteorological Problems in Antarctica, held in Moscow, October 26 to 28, 1959. The summaries are arranged in four groups: (1) general problems of the geography of Antarctica; (2) atmospheric circulation; (3) radiation balance; (4) heat balance, climate and special features of individual elements; (5) methods of observation and measurement. No personalities are mentioned. There are no references.

PAGE II. NAUCHNAYA KADRY, REZULTATY, KLIMAT, IZM.

36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000

ZAKIYEV, Kh.Ya.; AVSYUK, G.A., otv.red.; OGANOVSKIY, P.N., red.

[Third Antarctic Continental Expedition; snow cover] Tret'ia kontinental'naya antarkticheskaya ekspeditsiya; snezhnyi pokrov. Moskva, 1960. 38 p. (Materialy glatsiologicheskikh issledovaniy). (MIRA 14:3)

1. Akademiya nauk SSSR. Institut geografii.
(Antarctic regions--Snow)

ZAKIYEV, Khristofor Yakovlevich; BABAKHOVA, N.Kh., red.; BOROVINSKAYA,
L.M., tekhn. red.

[The queen of cold; from a geographer's diary] Koroleva kh-
loda; iz dnevnika geografa. Rostov-na-Donu, Rostovskoe
knizhnoe izd-vo, 1961. 93 p. (MIRA 17:4)

ZAKIYEV, Yu. E.

AD: Nr. 960-11 7 May
QUANTUM OSCILLATIONS OF MAGNETIC RESISTANCE OF n-InSb IN STRONG
PULSED MAGNETIC FIELDSAmirkhanov, Kh. I., R. I. Bashirov, and Yu. E. Zakiev. IN: Akademiya nauk
SSSR. Doklady, v. 148, no. 6, 21 Feb 1963, 1279-1282.
S/020/63/148/006/007/023

Pulsed magnetic fields of up to 400 koe have been used to determine the dependence of the longitudinal and transverse magnetic resistance of InSb single-crystal samples of varying purity on external magnetic fields in the 20 to 77°K range, and to investigate the Shubnikov—de Haas effect in strong magnetic fields. Results were obtained by direct oscillographic recording and are shown to agree (within the range of experimental errors) with theory and with results obtained previously by other methods. It is shown that with $1/H$, where H is the external magnetic field, magnetic resistance undergoes quasiperiodic oscillations which disappear with large magnetic fields. Splitting of the Landau levels is taken into account. Small deviations of the results from theory, which persist even after spin effects are accounted for, are explained as being due possibly to the nonparabolic nature of the InSb conductivity zone.

[BB]

Card 1/1

L 27985-66 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6012489

SOURCE CODE: UR/0181/66/008/004/1221/1226

AUTHOR: Zakiyev, Yu. E.

ORG: Institute of Physics, Dagestan Branch, AN SSSR, Makhachkala
(Institut fiziki Dagestanskogo filiala AN SSSR)

TITLE: Longitudinal magnetoresistance of n-type indium arsenide in the
ultraquantum limit

SOURCE: Fizika tverdogo tela, v. 8, no. 4, 1966, 1221-1226

TOPIC TAGS: indium alloy, arsenide, magnetoresistance, quantum theory,
Hall effect

ABSTRACT: The purpose of the investigation was to check on the quantum-
theoretical conclusions of E. N. Adams and T. D. Hallstein (J. Phys.
Chem. Sol. v. 10, 254, 1959) and to determine the predominant scattering
mechanism. The investigations were made on n-InAs which is claimed to
be more suitable for this purpose than the previously investigated n-InSb.
The experimental data on the longitudinal magnetoresistance were obtained
in a temperature interval 20.4 -- 608K in a magnetic field up to 450 kOe.
The strong magnetic fields were obtained by a pulsed method and the
pulse half-cycle ranged from 200 -- 300 μ sec, so that inertia could be

Card

1/2

L 29985-66

ACC NR: AP6012489

neglected. The change in the resistance of the sample was determined directly with an oscilloscope. The longitudinal magnetoresistance and the Hall effect were measured on samples with conduction electron density $3 \times 10^{16} \text{ cm}^{-3}$ and mobility $\mu_0 = 31,000 \text{ cm}^2/\text{v-sec}$. The results show that the longitudinal magnetoresistance increased with the field without limit at almost all temperatures except in the region of 600K, where complete saturation set in. In the range from 100 to 300K, the longitudinal magnetoresistance varies like $AH^{2/3}$, where $A \approx 3.88 \times 10^{-5} \text{ ohm-cm/kOe}$. At higher temperatures this dependence becomes somewhat weaker. The temperature dependence of the magnetoresistance is such that the magnetoresistance drops from 20 to 77K, has a minimum near 100K, and then rises to a maximum near 350K. The results are in full agreement with the theory of Adams and Hallstein for a nondegenerate system in the ultra-quantum limit. Some results observed in the interval 20 -- 77K do not agree with any of the known scattering mechanisms discussed in the theory and can be interpreted as being due to a possible gradual lifting of the degeneracy of the electron gas in a quantizing magnetic field. The author thanks Kh. I. Amirkhanov and I. M. Tsidil'kovskiy for a discussion of the results. Orig. art. has: 3 figures, 9 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 19Jul64/ ORIG REF: 005/ OTH REF: 007

Card 10 2/2

L 38878-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD
 ACC NR: AP6018561 SOURCE CODE: UR/0181/66/008/006/1919/1923
 61
 B

AUTHOR: Zakiyev, Yu. E.

ORG: Institute of Physics of the Dagestan Branch, AN SSSR, Makhachkala (Institut fiziki Dagestanskogo filial AN SSSR)

TITLE: Transverse magnetoresistance of n-InAs in the ultraquantum limit
 SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1919-1923

TOPIC TAGS: magnetoresistance, indium compound, arsenide, quantum theory, electron mobility, temperature dependence, magnetic field

ABSTRACT: Since their earlier measurements of the magnetoresistance of InAs in a longitudinal magnetic field (ZhETF v. 41, 6, 1961) did not agree with the theory of E. N. Adams and T. S. Halstein (J. Phys. Chem. Sol. v. 10, 254, 1959), the authors report the measurements in a transverse magnetic field in a wide range of fields (up to 420 kOe) and temperatures (20.4 - 600K). Preliminary tests were made to establish the region of applicability of Ohm's law and to ensure that the main measurements are made in this region. These tests have shown that the magnetoresistance decreased rapidly in the region where Ohm's law was not satisfied. The magnetoresistance increased almost without limit with increasing field intensity at all temperatures, and the temperature dependence of the magnetoresistance was calculated from the plots of the magnetoresistance against the field. The Hall angle decreased with increasing

Card 1/2

L 38878-66

ACC NR: AP6018561

temperature for almost all fields >100 kOe. The results are explained by postulating that the equilibrium carrier density is independent of the magnetic field, that the carrier energy becomes quantized in the field, and that the impurities are not uniformly distributed over the sample volume. It is shown that at temperatures $20 - 77$ K the comparison with theory is not feasible, but at temperatures $77 - 300$ K the relations obtained for the transverse magnetoresistance and the carrier mobility can be reconciled with the theory of V. I. Gurevich and Yu. A. Firsov (ZhETF v. 40, No. 1, 1961), and that in the region $\sim 500 - 600$ K the agreement with the theory of Adams and Halstein is satisfactory. Orig. art. has: 4 figures and 8 formulas.

SUB CODE: 20/ SUBM DATE: 24Jul65/ ORIG REF: 003/ OTH REF: 003

ne
Card 2/2

L 38858-66 EWT(m)/EWF(t)/ETI IJP(c) JD
ACC NR: AF6018585

SOURCE CODE: UR/0181/66/008/006/1974/1975

AUTHOR: Zakiyev, Yu. E.

ORG: Institute of Physics of the Dagestan Branch, AN SSSR (Institut fiziki Dagestan-
skogo filiala AN SSSR); Dagestan State University im. V. I. Lenin, Makhachkala
(Dagestanskiy gosudarstvennyy universitet)

TITLE: Concerning the oscillations of the longitudinal magnetoresistance in strongly
doped n-type indium arsenide

SOURCE: Fizika tverdogo tela, v. 8, no. 6, 1966, 1974-1975

TOPIC TAGS: indium compound, arsenide, magnetoresistance, electron spin, quantum
oscillation, impurity level

ABSTRACT: The purpose of the investigation was to check on the theory of longitudinal
magnetoresistance, with allowance for the electron spin, recently developed by A. L.
Efros (FTT v. 7, 1501, 1965). To this end, the author measured the longitudinal
magnetoresistance in strongly doped n-InAs at 15K and also thoroughly analyzed the
data at 20K which he reported earlier (Candidate's Dissertation, Physicotechnical
Institute, Leningrad, 1964). The results yielded an oscillation maximum at $H \approx 230$
kOe, against a theoretical calculation, without allowance for the smearing of the
Landau sublevel, of 269 kOe. Reasons why this discrepancy cannot be attributed to
superposition of the transverse magnetoresistance are presented. Calculation of the
Dingle temperature shows it to be much higher than the measurement temperature (54 vs.

Card 1/2

AMIRKHANOV, Kh.I., akademik; BASHIROV, R.I.; ZAKIYEV, Yu.E.

Quantum oscillations of magnetoresistance in n-InSb in high pulsed magnetic fields. Dokl. AN SSSR 148 no.6:1279-1282 F '63. (MIRA 16:3)

1. Institut fiziki Dagestanskogo filiala AN SSSR. 2. AN AzerSSR (for Amirkhanov). (Magnetoresistance) (Quantum theory) (Indium antimonide)

ZAKIYEVA, S. Kh.; BELUGINA, G. V.; KONSTANTINOVA, V. V.;
REBINDER, P. A.

Effect of the solid disperse phase content on the intrinsic
viscosity of concentrated suspensions in a structured
medium. Koll. zhur. 24 no.6:678-681 N-D '62.
(MIRA 16:1)

1. Institut fizicheskoy khimii AN SSSR, Moskva.

(Colloids) (Viscosity) (Suspensions(Chemistry))

S/020/60/132/04/16/064
B014/B007

AUTHORS:

Amirkhanov, Kh. I., Academician of the AS Azerbaydzhanskaya
SSR, Bashirov, R. I., Zakiyev, Yu. E.

TITLE:

Galvanometric Effects in n-InSb in Magnetic Pulsed Fields

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 4, pp. 793-796

TEXT: In the introduction, some investigations carried out with germanium are mentioned, among them those by I. G. Pakidov and E. A. Zavadskiy (Ref. 6). The present paper contains experimentally determined data of investigations of the Hall effect carried out on five n-type indium-antimonide samples in magnetic pulsed fields with field strengths of up to 900 kilogauss. The dependence of the effects on the field strength and temperature were investigated. The dimensions of the samples are given, and the measurement of the longitudinal magnetic resistance and the transverse resistance are discussed. Fig. 1 shows the dependence of the longitudinal and the transverse magnetic resistance on the magnetic field strength for n- and p-type samples. Fig. 2 graphically represents the dependence of the Hall constant of a sample on the magnetic field

Card 1/2

Galvanometric Effects in n-InSb in Magnetic Pulsed Fields

S/020/60/132/04/16/064
B014/B007

strength, and Fig. 3 is a graphical representation of the dependences of the longitudinal and the transverse magnetic resistance for two samples. The results are inexplicable from the classical standpoint of galvanometric effects. The curves given in Figs. 1 and 2 are explained by the quantum character of the motion of electrons in the magnetic field. The author discusses this standpoint in detail and gives several formulas. The dependence of the longitudinal and the transverse magnetic resistance on temperature is brought into connection with the two scattering mechanisms acting within the temperature range of from 77°K to 200°K. The dependences of the galvanometric effects on the magnetic field described here were observed also in n-type samples of HgTe and InAs. The authors thank N. B. Brandt for taking part in the discussion of the results. There are 3 figures and 14 references, 3 of which are Soviet. ✓

ASSOCIATION: Dagestanskiy filial Akademii nauk SSSR (Dagestan Branch of the Academy of Sciences, USSR)

SUBMITTED: March 4, 1960

Card 2/2

24.7700

s/058/62/000/005/088/119
A061/A101

AUTHORS: Amirkhanov, Kh. I., Bashirov, R. I., Zakiyev, Yu. E.

TITLE: Quantum galvanomagnetic effects in n-type InAs

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 31, abstract 5E246 ("Zh. eksperim. i teor. fiz.", 1961, v. 41, no. 6, 1699-1703, English summary)

TEXT: Hall effect and resistance in high pulsed magnetic fields were examined on n-type InAs specimens between 20 and 360°K. Magnetoresistance grew unlimitedly as a result of the quantization of carrier motion in the magnetic field. A concentration effect was established at hydrogen temperatures. ✓B

[Abstracter's note: Complete translation]

Card 1/1

31765

S/056/61/041/006/001/054

B108/B138

24,2200 (1160,1164,1147)

AUTHORS: Amirkhanov, Kh. I., Bashirov, R. I., Zakiyev, Yu. E.

TITLE: Quantum galvanomagnetic effects in n-type InAs

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 41,
no. 6(12), 1961, 1699-1703

TEXT: Hall effect and resistivity were studied in a n-type InAs strong pulsed magnetic field at temperatures from 20 to 360°K. A magnetic field of up to 450,000 gauss was achieved by discharging a 1200-μF capacitor block through a beryllium bronze coil. The relative change in resistivity in a pulsed magnetic field does not depend on the length-to-width ratio of the specimens where this is greater than 10. The specimens studied had impurity concentrations of about $3 \cdot 10^{16} \text{ cm}^{-3}$ and $2 \cdot 10^{18} \text{ cm}^{-3}$. Figs. 3 and 4 show the results of measurements of Hall constant R and resistivity in a transverse magnetic field for two kinds of samples: Γ_1 (G1)-type InAs with a conductivity of $175 \text{ ohm}^{-1} \text{ cm}^{-1}$ and $R = 200 \text{ cm}^3 \text{ C}^{-1}$ at 77°K, and

Card 1/0 3

31765

S/056/61/041/006/001/054

B108/B138

Quantum galvanomagnetic effects in...

M-13 (M-13)-type InAs with $\sigma = 2870 \text{ ohm}^{-1}\text{cm}^{-1}$ and $R = 3 \text{ cm}^3\text{C}^{-1}$ at 77°K . In G1-type specimens at 300 and at 77°K Hall constant was independent of the magnetic field strength up to 400,000 gauss. At 20°K it was constant in fields of up to 160,000 gauss and then rose slightly, due to the fact that at $H > 160,000$ gauss the activation energy of the impurities is greater than the mean energy of the free electrons. Therefore, the carrier equilibrium concentration decreases. In the strongly degenerate M-13-type specimens at 20°K Hall constant did not change in a magnetic field, owing to overlapping of the conduction band and of impurity levels. It is pointed out that InAs could be used as a pickup in magnetic-field strength measurements. Scattering of carriers in G1-type InAs has a mixed phonon-ion character. In the range $20\text{-}77^\circ\text{K}$ a strong magnetic field reduces the degeneracy which is marked by only a slight dependence of $\Delta\sigma/\sigma_0$ on H . This becomes stronger if the concentration of the equilibrium carriers decreases (M. I. Klinger, P. I. Voronyuk. ZhETF, 33, 77, 1957). There are 4 figures and 13 references: 5 Soviet and 8 non-Soviet. The three most recent references to English-language publications read as follows: P. N. Argyres. J. Phys. Chem. Solids, 8, 124, 1959; E. N. Adams,

Card 2/3

Quantum galvanomagnetic effects in...

T. D. Holstein. J. Phys. Chem. Solids, 10, 254, 1959; J. R. Dixon,
D. P. Eright. J. Appl. Phys., 30, 733, 1959.

ASSOCIATION: Dagestanskiy filial Akademii nauk SSSR (Dagestan Branch of
the Academy of Sciences USSR)

SUBMITTED: February 5, 1961 (initially)
July 25, 1961 (after revision)

Fig. 3. Resistance versus magnetic field strength.

Legend: (a), (b), (b') for G1-type InAs, (c) for M-13-type InAs.
Abscissa - $H \cdot 10^3$ gauss.

Fig. 4. G1-type InAs.

Legend: (a) resistance versus temperature ($H = 252,000$ gauss), (b) Hall
constant versus magnetic field strength ($T = 20^\circ K$), (c) resistance versus
magnetic field strength ($T = 20^\circ K$). Abscissa - $H \cdot 10^3$ gauss; T, degree K.

Card 3/4

AMIRKHANOV, Kh.I., akademik; DASHIROV, R.I.; ZAKIYEV, Yu.E.

Galvanomagnetic phenomena in n-InSb in pulse magnetic fields.
Dokl.AN SSSR 132 no.4:793-796 Je '60. (MIRA 13:5)

1. Dagestanskiy filial Akademii nauk SSSR. 2. AN AzerbSSR (for
Amirkhanov).
(Indium antimonide--Magnetic properties)

AMIRKHANOV, Kh.I.; BASHIROV, R.I.; ZAKIYEV, Yu.E.

Variation of resistance in high magnetic fields in n-type
indium arsenide. Fiz. tver. tela 5 no.2:469-474 F '63.
(MIRA 16:5)

1. Institut fiziki Dagestanskogo filiala AN SSSR, Makhachkala.
(Indium arsenide—Electric properties) (Magnetic fields)

ZAKIYEVA, F.

Husband and wife are radio amateurs. Radio no.8:12 Ag '62.
(Radio operators) (Amateur radio stations) (MIRA 15:8)

L3801

S/069/62/024/006/005/009
B101/B180

11/280
AUTHORS:

Zakiyeva, S. Kh., Belugina, G. V., Konstantinova, V. V.,
Rebinder, P. A.

TITLE:

Effect of the solid disperse phase content on the limiting
viscosity of concentrated suspensions in a structurized medium

PERIODICAL: Kolloidnyy zhurnal, v. 24, no. 6, 1962, 678 - 681

TEXT: The aging of a suspension of aluminum (particle size, 6 - 13 μ) dispersed in a purified paraffin-naphthene fraction, thickened with 2% by weight of aluminum naphthenate, was investigated for φ the solid disperse phase content, which ranged from 5 to 31% by volume. Measurements were made of η_0 the limiting viscosity of the medium and of $\eta_\varphi = \eta_0 \cdot K(\varphi)$ the limiting viscosity of the suspension, where $K(\varphi)$ is the relative viscosity of the suspension dependent on φ . An investigation of η_0 and η_φ as dependent on age showed that within 21 days the η_φ 's of suspensions with $\varphi = 5 - 23\%$ dropped to the same value as the η_φ of the unfilled gel. This means that the particles of the solid disperse phase did not form any

Card 1/2

S/069/62/024/006/005/009
B101/B180

Effect of the solid...

additional coagulation structure. For more strongly aged gels with lowered η_0 values, $K(\varphi)$ is higher in the low φ range (up to 23%), and lower at higher φ (31%). At $\varphi = 31\%$ the particles of the disperse phase begin to act as an active filler. The fact that the $K(\varphi)$'s of all highly structuralized media, i.e. gels with $\eta_0 > 115$ poises, is independent of η_0 up to $\varphi = 23 - 27\%$ suggests that the suspension is completely stabilized. There are 2 figures.

ASSOCIATION: Institut fizicheskoy khimii AN SSSR, Moskva (Institute of Physical Chemistry of the AS USSR, Moscow)

SUBMITTED: July 12, 1962

Card 2/2

S/020/60/132/02/38/067
B004/B007

AUTHORS: Belugina, G. V., Konstantinova, V. V., Zakryeva, S. Kh., Rebinder,
P. A., Academician

TITLE: Investigation of the Gel-forming Ability of Aluminum Oleates in
Benzene

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 380-383

TEXT: The authors discuss the behavior of the gels of aluminum soaps of the general composition $Al(OH)_n(OOCR)_m$, where $n + m = 3$. They mention the dependence of the properties of such substances on the number of hydroxyl groups, on the association of the molecules, and on the molecular weight and the type of acid radical. It was the aim of the present paper to investigate the behavior of the aluminum soaps of unsaturated fatty acids on the basis of the example of oleic acid. The aluminum oleates were prepared by the reaction of $Al_2(SO_4)_3$ with an alcoholic solution of sodium oleate at $70^\circ C$. From the aluminum oleates gels were formed in pure benzene. The influence exerted by composition on the viscosity η was investigated on 8% gels, which were precipitated in the case of an alkali excess of 25-200%. Fig. 1 shows the dependence of η on the content of free alkali

Card 1/2

Investigation of the Gel-forming Ability of
Aluminum Oleates in Benzene

S/020/60/132/02/38/067
B004/B007

after 5, 7, and 30-32 days. η attains a maximum at 50% alkali excess ($n = 1$), and a second lower maximum in the case of an alkali excess of 150% ($n = 1.7$). The soap precipitated with alkali excess of 200% was no longer soluble in benzene. Like in the case of saturated fatty acids, bisubstituted aluminum soap ($n = 1$) of oleic acid had the greatest viscosity. The stability of the gels was low (Fig. 2). This is ascribed to the low chemical stability of unsaturated fatty acids. However, also α -naphthol added as antioxidant agent does not influence gel aging. This aging does not depend on the composition of the aluminum oleate, which fact distinguishes the Al oleates from the aluminum naphthenates (Fig. 2). Fig. 3a shows the increase of viscosity with increasing concentration of the soap. The dependence $\log \eta = K + a \log G$ (1) was found (K and $a =$ constants, $C =$ concentration). Increasing concentration (Fig. 4) retards the aging process. However, also 12% gels age and are durable for not more than two weeks, whereas 4% gels of aluminum naphthenates remain stable for longer periods. There are 4 figures and 8 references, 4 of which are Soviet.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of
Physical Chemistry of the Academy of Sciences, USSR)

SUBMITTED: February 6, 1960
Card 2/2

BELUGINA, G.V.; ZAKIYEVA, S.Kh.; KONSTANTINOVA, V.V.; REBINDER, P.A.

Stabilization of concentrated suspensions by the structure formation
of the dispersion (hydrocarbon) medium. Koll.zhur. 23 no.6:68-
668 N-D '61. (MIRA 14:12)

1. Institut fizicheskoy khimii AN SSSR, Moskva.
(Suspensions (Chemistry)) (Hydrocarbons)

NIKITINA, S.A., kand.khim.nauk; TAUBMAN, A.B., doktor khim.nauk; ZAKIYeva, S.Fh.,
kand.khim.nauk

Physical and chemical principles of the dust-collecting action
of surface active agents. Bor'ba s sil. 3:29-39 '59.
(MIRA 12:0)

(SURFACE ACTIVE AGENTS)

(DUST--REMOVAL)

ZAKIYEVA, S.Kh.; TAUBMAN, A.B.

Investigation of the dust trapping capacity of wetting solutions in dust chambers. Zhur.prikl.khim. 32 no.4:797-800
Ap '59. (MIRA 12:6)

1. Institut fizicheskoy khimii AN SSSR.
(Air filters)

5(4)

AUTHORS:

Belugina, G. V., Zakiyeva, S. Kh.,
Rebinder, P. A., Academician, Taubman, A. B.

SOV/20-126-2-25/64

TITLE:

On the Stability and Viscosity of Concentrated
Suspensions in the Oleogels of Metallic Soaps
(Ob ustoychivosti i vyazkosti kontsentrirrovannykh
suspensiy v oleogelyakh metallicheskih myl)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2,
pp 318-321 (USSR)

ABSTRACT:

In the course of the investigations discussed in the present
paper the aluminum soaps of naphthenic acids were used as
structure-forming additions. They form oleogels with peculiar
structurally mechanical properties. These properties of
oleogels depend on the molecular nature of the dispersive
medium and may be regulated by variation of these factors.
In this connection, the authors investigated the time-
dependence of the viscosity of the gels of aluminum
naphthenate in hydrocarbon media and in concentrated
suspensions which are built up on the basis of such hydrocarbon
media. Ordinary technical surface-hardened oxidized aluminum
powder with particles of aluminum powder from 6 to 13 μ served

Card 1/3

On the Stability and Viscosity of Concentrated
Suspensions in the Oleogels of Metallic Soaps

SOV/20-126-2-25/64

as dispersive phase. The dispersion medium used was the purified basic paraffin-naphthene fraction of the fuel T - 1. The production of the aluminum soaps used for structure-formation is briefly described. A diagram shows the typical curves $\lg \eta - \tau$ for a 2% aluminum-naphthenate-gel. Here η denotes viscosity and τ - time. The introduction of a solid phase increases initial viscosity considerably, but without changing the character of its aging. Analogous curves of aging are given for 2%- and 4%-gels of an aluminum-naphthenate of other composition. If benzene is substituted for the paraffin-naphthene fraction, the initial viscosity of the gel is reduced, but the viscosity of the gel in the suspension undergoes practically no change for the duration of one month. The decrease of viscosity in the oleogels of the aluminum-naphthenate and in the corresponding suspensions is probably a consequence of the latent formation of aggregates. There are 2 figures, 1 table, and 10 references, 9 of which are Soviet.

Card 2/3

On the Stability and Viscosity of Concentrated
Suspensions in the Oleogels of Metallic Soaps

SOV/20-126-2-25/64

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR
(Institute for Physical Chemistry of the Academy of
Sciences, USSR)

SUBMITTED: February 26, 1959

Card 3/3

SOV/80-32-4-15/47

5(4)

AUTHORS: Zaklyeva, S.Kh., Taubman, A.B.

TITLE: Investigation of the Dust Collecting Capacity of Solutions of Wetting Agents in the Dust Chamber (Issledovaniye pyleu-lavlivayushchey sposobnosti rastvorov smachivateley v pylevoy kamere)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 797-800 (USSR)

ABSTRACT: Water is widely used in mining operations for reducing the concentration of quartz or coal dust. Special wetting reagents are added to water to increase its dust collecting capacity. The purpose of the present investigation was to test several wetting agents in a laboratory dust chamber of 1 m³ in volume. The chamber is illustrated by Figure 1 and described. A special method was developed which consisted in determining the dust collecting capacity of water and wetting agent solutions by the muddiness of suspensions which were formed by the dust collected in the process of liquid spraying. It was found that the new synthetic wetting agent PAC-Na, prepared in the Institut nefti AN SSSR

Card 1/2

SOV/80-32-4-15/47

Investigation of the Dust Collecting Capacity of Solutions of Wetting Agents
in the Dust Chamber

(Petroleum Institute of the AS USSR), effectively raises the dust collecting capacity of water. The results of experiments are shown in Graphs 2 and 3 and in Table. The muddiness of the suspension was measured by a nephelometer of the NMF-type. Acknowledgement to A.Ya.Larin is expressed for the supply of wetting agent samples. There are 1 diagram, 2 graphs, 1 table and 9 Soviet references.

ASSOCIATION:

Institut fizicheskoy khimii AN SSSR (Institute of Physical Chemistry of the AS USSR)

SUBMITTED:

December 31, 1957.

Card 2/2

O. A. ZAKIYEVA, S Kh.

Shearing stress and strength limit of consistent greases in the evaluation of their mechanical properties. A. A. Trapeznikov and S. Kh-Zakiyeva. Doklady Akad. Nauk S.S.S.R. 73, 819-22 (1950).—Strain (ϵ)-time (τ) and strain (ϵ)-stress (P) curves were detd., at 25° and -40°, for a grease (I) with 30% Ca stearate in nonpolar paraffin oil, and solidol (II) with 20% cottonseed-oil soap, under conditions of stepwise application of small load portions ΔP . A such ϵ - τ curves permit the detn. of the limiting stress P_0 (yield point) of beginning marked plastic flow, and of the corresponding elastic ϵ . The ϵ - P curves constructed from such ϵ - τ plots, correspond to infinitely slow loading, i.e., to the equil. ϵ as a function of P . At $P > P_0$, the ϵ - P curves become linear, and the ϵ - P curves vertical. At such infinitely slow loading, the P_0 point coincides with the strength limit P_s . On rapid application of equal load portions ΔP , e.g., with time intervals $\Delta \tau = 5$ and 1 min., between consecutive applications, the ϵ - P curves of II at 25° are shifted somewhat, relative to the equil. curve, in the direction of higher P , whereas for I, P_0 is identical with equil. curve. This indicates that, for I, P_0 is identical with P_s , whereas for II there is a slight difference. At -40°,

the 3 curves of ϵ ($\Delta \tau = 1$ and 5 min., and the equil. curve) diverge very markedly for both I and II, i.e., P_0 is markedly higher than P_s . This result contradicts the expected increase of brittleness at lower temps., according to which P_0 and P_s should draw closer to each other at lower temp. The contrary behavior of the consistent greases is attributed to a more rapid growth of the P -dependent structural viscosity η of plastic deformation (characteristic in the range $P > P_0$) with decreasing temp., as compared with its less rapid decrease with falling temp. The magnitude of the growth of P_0 with falling temp. and as compared with the spread between P_0 and P_s characterizes the plasticity of the grease as against its brittleness; in this sense, I is more brittle than II at 25°, whereas at -40° both I and II are plastic. That this spread is detd. by solvation, and not only by an increase of the viscosity of the oil with decreasing temp., follows from the fact that paraffin in paraffin oil at -40° shows only brittle rupture. The rapid growth of η with decreasing temp. is due to increased strength of the linkage of the molecules in their solvate envelopes. For that reason, greater plasticity, in the above sense, also goes hand in hand with greater stability of the grease with regard to sepn. of the oil. From the point of view of practical requirements, a grease, in order to attain a large strain in a short time, should have a not-too-high η at P slightly above P_0 , and falling rapidly with further increasing P , i.e., P_s should not be too far above P_0 . N. Thon

NIKITINA, S.A.; KONSTANTINOVA, V.V.; ZAKIYEVA, S.Kh.; TAURMAN, A.B.

Wetting capacity of surface-active substances and their rate of
adsorption from aqueous solutions. Zhur. prikl. khim. 34 no.12:2658-
2664 D '61. (MIRA 15:1)

(Surface-active agents) (Adsorption)

ZAKHMEVA, S. Kh.

"Structural-Mechanical Properties and Phase Changes in Models of Soap Consistency Greases." Cand Chem Sci, Inst of Physical Chemistry, Moscow, 1954.
(RZhKhim, No 5, Mar 55)

So: Sum. No 670, 29 Sept 55 - Survey of Scientific and Technical Dissertations
Defended at USSR Higher Educational Institutions (15)

Zakke, I. F.

PHASE I BOOK EXPLOITATION

SOV/6150

Akademiya nauk Latvyskoy SSR. Institut eksperimental'noy meditsiny.

Voprosy kurortologii. [t.] 5: Problemy fiziologicheskogo deystviya i terapevticheskogo primeneniya aeroionov (Problems in Health-Resort Therapy. v. 5: Studies of the Physiological Effect and Therapeutic Application of Air Ions). Riga, Izd-vo AN Latvyskoy SSR, 1959. 424 p. (Series: Its: Trudy, t. 20) Errata slip inserted. 1000 copies printed.

Sponsoring Agency: Akademiya nauk Latvyskoy SSR. Institut eksperimental'noy meditsiny.

Editorial Board: Resp. Ed.: L. L. Vasil'yev, Professor, P. D. Perli, Professor, P. G. Portnov, Candidate of Medical Sciences, Ya. Yu. Reynet, Candidate of Physical and Mathematical Sciences, and L.M. Tutkevich, Candidate of Medical Sciences; Ed.: A. Vengranovich; Tech. Ed.: A. Zhukovskaya.

Card 1/7

25

Problems in Health-Resort (Cont.)

SOV/6150

PURPOSE: This book is intended for physicians working at health resorts and for the general practitioner.

COVERAGE: This book, a collection of articles, is essentially the proceedings of the Second Conference on the Physiological Effect and Therapeutic Application of Air Ions, held at Riga (Latvian SSR) in December 1957. The use of negative air ions is believed to be beneficial in the treatment of nonhealing wounds and ulcers which often result from radiation injury. The book contains photos of numerous devices described in the text. Numerous references, mostly Soviet, are given at the end of some of the articles.

TABLE OF CONTENTS [Abridged]:

Gerke, P. Ya. Introduction	3
Vasil'yev, L. L. Current Problems of the Physiological and Therapeutic Effect of Air Ions	5
Card 2/7	

Problems in Health-Resort (Cont.)

SOV/6150

Gazhala, Ye. M. Influence of Lightweight Air Ions
Upon the Heart Muscle of a Rabbit Under Normal
Conditions and With Experimental Diphtherial Myo-
carditis

187

Pislyegin, A. K. The Biological Significance of Air
Ions and Some Peculiarities of Their Effect Upon
the Organism

195

Liyepa, V. E. Influence of Various Doses of Air Ions
Upon the Excitability of the Neuromuscular System

205

Siyde, E. K. Some Physiological Indices of the Ef-
fect of Negatively and Positively Ionized Atmos-
pheric Gas and Water Molecules

215

Zakke, I. F., O. Yu. Udris, I. P. Yaunkalns. Effect
of Positive and Negative Air Ionization on the Cy-
tology of the Blood and Connective Tissue of White
Rats

221

Card 6/7

ZAKLADNOY, M.S.

Track straightening machine in the Track Machinery Station. Put'
1 put. khoz. 8 no.11216 '64 (MIRA 18:2)

1. Nachal'nik putevoy mashinnoy stantsii No.132, strantsiya
Poltava, Yuzhnoy dorogi.

ZAKLADNOY, V.

Life itself dictates it. Sov.profssoiuzu 7 no.22:42 N '59.
(MIRA 12:12)

1. Chlen prezidiuma TSentral'nogo komiteta profsoyuzov rabochikh
i slushashchikh sel'skogo khozyaystva i zagotovok.
(Labor laws and legislation)

SHKURATOV, I.; ZAKLADNOY, V., starshiy nauchnyy sotrudnik

For the correct organisation of wages on state farms. *Sels.trud*
8 no.3:34-39 Mr '63. (MIRA 16:3)

1. Sekretar' Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov
(for Shkuratov).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut
ekonomiki sel'skogo khozyaystva (for Zakladnoy).
(Agricultural wages)

ZAKLADNOY, Viktor Stepanovich

[Wage tables for piecework of state-farm workers engaged in mechanized operations] Tablitsy dlia nachisleniia zarabotnoi platy rabochim sovkhozov na mekhanizirovannykh rabotakh, pri sdel'noi oplate truda. Moskva, Gosstatizdat, 1962. 301 p.
(MIRA 16:5)

(Agricultural wages)

ZAKLADNOY, Viktor Stepanovich, st. nauchnyy sotr.; KOMAROVA, Tamara
Alekseyevna, st. ekonomist; DMITRIYEV, L.A., red.;
SAYTANIDI, L.D., tekhn. red.

[Wage for drivers on state farms] Oplata truda shoferov v
sovkhozakh. Moskva, Izd-vo M-va sel'skogo khoz. RSFSR,
1963. 155 p. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ekonomiki
sel'skogo khozyaystva (for Zakladnoy). 2. Upravleniye organi-
zatsii truda i zarabotnoy platy Ministerstva proizvodstva i
zagotovok sel'skokhozyaystvennykh produktov RSFSR (for
Komarova).

(Wages—Highway transport workers)
(State farms)

ZAKLADNOY, Viktor Stepanovich; KOMAROVA, Tamara Alekseyevna;
MIKHEL'YAN, T.S., red.

[Wages for motor vehicle drivers on state farms] Oplata
truda shoferov v sovkhozakh. 2., dop. izd. Moskva,
Rossel'khozizdat, 1965. 159 p. (MIRA 18:3)

ZAKLADNIY, G.A.

Some problems of controlled change of the heredity in millet.
Agrobiologiya no.3:459-460 My-Je '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zernobobovykh
kul'tur, Orel.

(Orel Province--Millet)

ZAKLADNYY, G.A.

Some problems of scientific justification of strain
renovation time and improvement of millet seed production.
Agrobiologiya no.3:353-358 My-Je '65.

(MIRA 18:11)

1. Zaveduyushchiy otделom krupyanykh kul'tur Vsesoyuznogo
nauchno-issledovatel'skogo instituta zernobobovykh kul'tur,
g. Orel.

CHUMAKOV, M.P.; L'VOV, D.K.; GAGARINA, A.V.; VIL'NER, L.M.; RODIN, I.M.;
ZAKLINSKAYA, V.A.; GOL'DFARB, L.G.; KHANINA, M.K.

Study of conditions influencing the effectiveness of immunization
against tick-borne encephalitis. Report No.1: Influence of the
immunogenic properties of the vaccine on the effectiveness of
vaccination and revaccination. Vop. virus. 10 no.2:168-172 Mr-Ap
'65. (MIRA 18:10)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR, Moskva.

ZAKLINSKAYA, Ye.D.; SENKEVICH, N.G.

"The bearing of glacial and interglacial epochs on the formation and extinction of plant taxa" by J.Iversen. Reviewed by E.D. Zaklinskaia, N.G.Senkevich. Biul.Kom.chetv.per. no.27:160-161 '62. (MIRA 16:4)

(Europe, Western—Glacial epoch)
(Europe, Western—Plants, Effect of temperature of)
(Iversen, J.)

~~ZAKHARSKII, M.L.~~

Raising chicks on rations with a prevalence of corn. Biol.v shkole
no.2:90-91 Mr-Apr '57. (MLBA 10:5)

1. Saratovskiy zooveterinarnyy institut.
(Poultry--Feeding and feeding stuffs)
(Stock and stockbreeding--Study and teaching)

STEIN, J., MUDr.; ZAKLINOVA, M., MUDr.

Two cases of medulloblastoma of the cerebellum in adults. Cesk. neur.
21 no.6:398-403 Nov 58.

1. Neurologická klinika KU v Praze, prednosta akademik K. Henner.
 (CEREBELLUM, neoplasms
 medulloblastoma, in adults (Cz))
 (MEDULLOBLASTOMA, case reports
 cerebellum, in adults (Cz))

ZAKLADNOY, V.

Establish technically based production standards for agriculture.
Sots. trud 5 no.6:90-97 Je '60. (MIRA 13:11)
(Agriculture--Production standards)

ZAKLADNOY, Viktor Stepanovich; PRUTOVYKH, P.N., otv. red.; MAKAROVA,
O.K., red.; IL'YUSHENKOVA, T.P., tekhn. red.

[Tables for calculating wages for state farm workers engaged
in manual work and work with horse-drawn machinery where the
piecework wage system is in operation] Tablitsy dlia nachisleniia
zarabotnoi platy rabochim sovkhozov na konno-ruchnykh
rabotakh; pri sdel'noi oplate truda. Moskva, Gosstatizdat,
1962. 191 p. (MIRA 15:10)

(Agricultural wages--Tables and ready-reckoners)

ZAKLADNYY, Yevgeniy Mikhaylovich; SHCHEGOLEV, Nikolay Vladimirovich;
ARZUMANOVA, N.A., red.; MATVEYEV, A.P., tekhn.red.

[Tales about polymers] Rasskazy o polimerakh. Moskva, Izd-vo
"Sovetskaya Rossiya," 1960. 132 p.

(MIRA 14:4)

(Polymers)

NOWAKOWSKA, Anna (Lodz); ZAKLICKA, Barbara (Lodz)

The use of actidione for microbiological control in the yeast industry. Przemysl spoz 16 no.2:32-40 '62.

CHUMAKOV, M.P.; L'VOV, D.K.; GOL'DFARB, L.G.; ZAKLINSKAYA, V.A.;
GAGARINA, A.V.; MASHKOV, V.T.; YASIN, A.Ye.; RODIN, V.I.;
VIL'NER, L.M.

Effect of the length of intervals between inoculations on the
efficacy of vaccination and revaccination against tick-borne
encephalitis. Vop. virus. 10 no.3:266-270 My-Je '65.

(MIRA 18:7)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR, Moskva,
i Kemerovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.

ZAKLINSKAYA, V.A.; L'VOV, D.K.; CHUMAKOV, M.P.; LEVINA, L.S.

Immunogenic and antigenic activity of the inactivated cultural
vaccine as related to different viruses of antigenic tick-borne
encephalitis. complex. Vop. virus. 10 no. 6:649-656 N-D '65
(MIRA 19:1)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva. Submitted July 9, 1964.

LEVON, L.K.; ZAKLINSKAYA, V.A.; CHUMAKOV, M.V.; LEVINA, L.S.

Spectrum of antihemagglutinating antibodies following experimental virus immunization of tick-borne encephalitis complex. Vop. virus 10 no. 6:657-663 N-D '65 (MIRA 19:1)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR, Moskva. Submitted July 9, 1964.

CHUMAKOV, M.P.; L'VOV, D.K.; SARMANOVA, Ye.S.; GOL'DFARB, L.G.; NAYDICH, G.N.;
CHUMAK, N.F.; VIL'NER, L.M.; ZASUKHINA, G.D.; IZOTOV, V.K.;
ZAKLINSKAYA, V.A.; UMANSKIY, K.G.

Comparative study of the epidemiological effectiveness of vaccinations with tissue culture and brain vaccines against tick-borne encephalitis. Vop. virus. 8 no.3:307-315 My-Je'63.
(MIRA 16:10)

1. Institut poliomyelita i virusnykh entsefalitov AMN SSSR,
Moskva i Kemerovskaya oblastnaya sanitarno-epidemiologicheskaya
stantsiya..

(ENCEPHALITIS—PREVENTIVE INOCULATION)

L'VOV, D.K.; ZAKLINSKAYA, V.A.

Use of the hemagglutination inhibition reaction for the study
of the immunogenic characteristics of formalized vaccines
against tick-borne encephalitis. Vop. Virus. 8 no.3:360-361
My-Je'63. (MIRA 16:10)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR,
Moskva.

(ENCEPHALITIS) (VACCINES) (BLOOD—AGGLUTINATION)

CHUMAKOV, M.P.; L'VOV, D.K.; ZAKLINSKAYA, V.A.; YASIN, A.Ye.; MOROZOV, K.V.

Rate of antibody accumulation in patients during the early period following vaccination and revaccination against tick-borne encephalitis. Vop. virus. 9 no.5:601-604 S.O '64.

(MIRA 18:6)

1. Institut poliomielita i virusnykh entsefalitov AMN SSSR i kafedra epidemiologii i Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova, Moskva.

L 25986-66 EWT(1)/T JK
 ACC NR: AP6016097 (N) SOURCE CODE: UR/0402/65/000/006/0657/0663
 AUTHOR: L'vov, D. K.--Lvov, D. K.; Zaklinskaya, V. A.; Chumakov, H. P.; Lavina, L. S.
 ORG: Institute of Poliomyelitis and Viral Encephalitis, AMN SSSR, Moscow (Institut poliomyelita i virusnykh entsfalitov AMN SSSR)
 TITLE: Antihemagglutinating antibody spectrum following experimental immunization⁶ with tick-borne encephalitis viruses
 SOURCE: Voprosy virusologii, no. 6, 1965, 657-663
 TOPIC TAGS: antibody, immunization, encephalitis, virus, rat
 ABSTRACT: This study deals with the patterns of formation and dynamics of homologous and heterologous antihemagglutinins following the experimental immunization with various Eastern and Western strains of tick-borne encephalitis virus (Sof'in, Khabarovsk-17, Bars, Al'shevskiy, Pan, Khopr, No 256, No 20536) as well as with louping ill, Omsk hemorrhagic fever, Kyasanur forest, Langat, Powassan and Negishi viruses, on using white rats as the experimental animals (immunization by injection of a 10% brain suspension of suckling rats infected with the corresponding strains). The hemagglutination-inhibition reaction was carried out by the standard virus titration technique. The differences in the development of homologous and heterologous antibodies following hypo-, hyper- and reinmunization were found to be quantitative in nature.
 Card 1/2 UDC: 616.155.1-007.481-097.5-02:616.988.25-095.371

L 25986-66

ACC NR: AP6016097

No essential change in the difference between homologous and heterologous antibody titers was observed in animals tested at different times. Immunization with any strain of tick-borne encephalitis virus leads to the development of antihemagglutinins for all the other strains of this virus. At the same time, antibodies for all the other representative strains of the complex are formed, but at lower titers. For Omsk hemorrhagic fever, Langat, louping ill and Negishi viruses the difference in antibody titers is not large (log 1-3) but for Kyasanur forest and Powassan viruses the difference between homologous and heterologous antibody titers is significant (log 3-5 and 5-7, respectively). Immunization with any virus of the subgroup except Powassan virus leads to the development of antibodies for all the other viruses of the complex; then the antibody titers are log 1-3 lower than for the homologous virus, and with respect to the Kyasanur forest and Powassan viruses these titers are always much lower (log 4-6). Following immunization with the last 2 viruses, and particularly with Powassan, heterologous antibody titers are much lower than homologous antibody titers. Orig. art. has: 4 figures and 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 09Jul64 / ORIG REF: 001 / OTH REF: 007

Card 2/2 *jt*

L 25985-66 EWT(1)T JK

ACC NR: AF6016096 (N)

SOURCE CODE: UR/0402/65/000/006/0649/0656

AUTHOR: Zaklinskaya, V. A.; L'vov, D. K.—Lvov, D. K.; Chumakov, M. P.; Levina, L. S.

ORG: Institute of Poliomyelitis and Viral Encephalitis, AMN SSSR, Moscow (Institut poliomyelita i virusnykh entsefalitov AMN SSSR)

TITLE: Immunogenic⁶ and antigenic activity of inactivated cultural vaccine with respect to various viruses of the antigen complex of tick-borne encephalitis⁶ 28 B

SOURCE: Voprosy virusologii, no. 6, 1965, 649-656

TOPIC TAGS: encephalitis, vaccine, virus, mouse, immunity

ABSTRACT: The existence of various viruses of the tick-borne encephalitis complex requires developing a single effective vaccine for all these viruses. In this connection, the authors investigated the immunogenic and antigenic properties of a cultural vaccine against tick-borne encephalitis, developed at the Institute of Poliomyelitis and Viral Encephalitis. Immunogenic properties were investigated in experiments on the resistance of immunized (double subcutaneous inoculation of 0.5 cc at a time) pure-bred mice with respect to LD₅₀ following infection with the corresponding virus strain. The antigenic properties of the vaccine were determined by investigating the sera of the vaccinated and revaccinated volunteers and the agglutination reactions. The immunogenic properties of the vaccine were found to apply more or less to all the investigated eight Eastern and Western strains of tick-borne encephalitis 2

Card 1/2

UDC: 615.371:576.858.257-092.22:616.998.25-085.371-07:616.15-097

L 25985-66

ACC NR: AP6016096

virus (Sof'in, Khabarovsk-17, Bars, Al'shevskiy, Pan, No 256, Khpr, No 20536), and they are similar or lower with respect to the viruses of Omsk hemorrhagic fever, Scotland ovine encephalomyelitis and certain other viruses. Similarly, as regards antigenic properties, the virus-neutralizing activity of the sera of inoculated volunteers proved to be the same with respect to all the strains of the tick-borne encephalitis virus and nearly the same for viruses of other types. These findings warrant the assumption that the new cultural vaccine against tick-borne encephalitis virus is effective not only in Eastern but also in Western USSR. Moreover, this does not preclude the possibility of employing this vaccine in the prophylaxis of other infections caused by viruses of the antigenic subgroup of tick-borne encephalitis. Orig. art. has: 4 figures and 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 09Jul64 / ORIG REF: 003 / OTH REF: 006

Card 2/2

GRISHUK, V. P. & ZAKLINSKAYA, Ye. D.

Analiz izkopeyanykh nyl'tey i sper i eve primeoniye v paleogeografii
(An Analysis of Fossils of Pollen and Spores and its Application in
Paleogeography), Ogis, Geografis, 1948.

ZAKLENSKAYA, Ye D

Opisaniye pyl'tsy i spor nekotorykh vidov rasteniy pol'yarnoy tundry. Opisaniye nekotorykh vidov pyl'tsy i spor, vydelennykh iz tretichnykh otlozheniy Pasekovskogo kar'yera Voronezhskoy oblasti [Description of the pollen and spores of certain plant species of the arctic tundra. Description of some species of pollen and spores isolated in the tertiary sedimentation of the Pasekov Quarry, Voronezh Oblast] Moskva, Izd-vo Akademii Nauk SSSR, 1953.

117 p. illus., diagrs (Akademiya Nauk SSSR. Institut Geologicheskikh Nauk. Trudy, Vyp. 142, Geologicheskaya Seriya, No. 59)

Contains bibliographies.

9N/5
622.4
.22

ZAKLINSKAYA, E.D.

Materials on the history of paleogenic and neogenic flora of the Northern Caucasus (representative data on the results of spore and pollen analysis of a basic cross section). (In: Akademiia nauk SSSR. Voprosy petrografii i mineralogii. Moskva, 1953. Vol. 1, p.419-446)
(MIRA 7:4)

(Caucasus, Northern--Paleobotany) (Paleobotany--Caucasus, Northern)

(Caucasus, Northern--Pollen, Fossil)

(Pollen, Fossil--Caucasus, Northern)

ZAKLINSKAYA, Ye.D.

Spore-pollen spectrum of a treeless zone. Priroda 41 no.7:94-97 J1 '53.
(MLRA 6:6)

1. Institut geologicheskikh nauk Akademii nauk SSSR. (Pollen)

1. ZAKLINSKAYA, E. D.
2. USSR (600)
4. Paleobotany
7. Principal stages in the development of the Cenozoic flora in the south of the European part of the U.S.S.R., based on data from analyses of spores and pollen. Dokl. AN SSSR 89, No. 5, 1953.

Discussion of the distribution of Cenozoic floristic complexes and of the spore-dust spectra in the Maykop area. States that spore-dust analysis is one of the most used methods of paleobotanists. Presented by Acad D. S. Belyankin.

259T49

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

ZAKLINSKAYA, Ye.D.; SUKACHEV, V.N., akademik.

Spore and pollen spectrum of the marine Oligocene of the northern Aral lake region. Dokl.AN SSSR 92 no.6:1213-1216 0 '53. (MLRA 6:10)

1. Akademiya nauk SSSR (for Sukachev).
(Aral lake--Paleobotany) (Paleobotany--Aral lake)

ZAKLINSKAYA, Ye.D.

Materials on the history of the flora and vegetation of the Paleocene of northern Kazakhstan in the Pavlodar region of the Irtysh Basin. Trudy Inst. geol. nauk 141:34-69 '53.

(MLRA 6:12)

(Irtysh basin--Pollen, Fossil) (Pollen, Fossil--
Irtysh basin)

ZAKLINSKAYA, Ye.D.

Description of pollen and spores of several species of plants of the polar tundra; description of several species of pollen and spores yielded by the Tertiary deposits of the Pasekovskiy pit in Voronezh Province. Trudy Inst.geol.nauk no.142:1-115 '53. (MLRA 7:5)
(Voronezh Province--Pollen, Fossil) (Pollen, Fossil--Voronezh Province)

ZAKLINSKAYA, Ye. D.

"Stratigraphic Significance of the Pollen of Gymnospermous Cenozoic Deposits of Pavlodarsk Pri-irtysh'ye and of Northern Priaral'ye." Cand Geol-Min Sci, Inst of Geological Sci, Acad Sci, Acad Sci USSR, Moscow, 1954. (KL, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 55

ZAKLINSKAYA, E. D.

USSR/Geology - Paleontology

Card 1/1 Pub. 22 - 38/48

Authors : Zaklinskaya, E. D.

Title : Vegetation during the period of life and death of the Taymirsk mammoth

Periodical : Dok. AN SSSR 98/3, 471-474, Sep 21, 1954

Abstract : Scientific report on the vegetation existing during the life and death of the Taymirsk mammoth was prepared by a special expedition of the Academy of Sciences USSR. Eight USSR references (1901-1953). Drawing.

Institution : ...

Presented by: Academician V. N. Sukachev, June 19, 1954

ZAKLINSKAYA, E. D.

USSR/Geology - Paleontology

Card 1/1 Pub. 22 - 35/45

Authors : Zaklinskaya, E. D.

Title : Spore-pollen spectra of the upper Eocene of the northern Aral region

Periodical : Dok. AN SSSR 99/4, 621-624, Dec 1, 1954

Abstract : Geological data on the peculiar types of pollen-spore spectra of the upper Eocene discovered in the Aral region, are presented. Seven USSR references (1930-1953). Illustrations.

Institution : ...

Presented by: Academician V. N. Sukachev, October 5, 1954

ZAKLINSKAYA, Ye.D.

On Paleogene flora found near the eastern edge of the Turgai
Gates (Upper part of the Turgai River, Amangel'dy District)
Dokl. AN SSSR 105 no.2:357-359 '55. (MLRA 9:3)

1. Institut geologicheskikh nauk Akademii nauk SSSR. Predstav-
leno akademikom V.M. Sukachevym.
(Turgai gates--Paleobotany)

ZAKLINSKAYA, Yelena Dmitriyevna; GRICHUK, V.P., otvetstvennyy redaktor;
CHEPIKOVA, I.M., redaktor izdatel'stva; NOVIKOVA, S.G., tekhnicheskii
redaktor.

[Stratigraphic significance of gymnospermous pollen in Cenozoic
deposits of the Pavlodar region in the Irtysh Valley and the Northern
Aral region] Stratigraficheskoe znachenie pul'tey golosemennyykh
kainozoiskikh otlozhenii pavlodarskogo priirtysh'ia i severnogo
priaral'ia. Moskva, Izd-vo akademii nauk SSSR, 1957. 219 p. (Akademiia
nauk SSSR, Geologicheskii institut. Trudy; no.6) (MLRA 10:4)
(Irtysh Valley--Pollen, Fossil)
(Aral region--Pollen, Fossil)

AUTHOR: Zaklinskaya, Ye.D. SOV-11-58-10-6/12

TITLE: The Principles of Paleofloristic Methods of Stratification of the Cenozoic Deposits of Kazakhstan and Adjacent Parts of the West Siberian Lowland (Printsipy paleofloristicheskogo obosnovaniya raschleneniya kaynozoysskikh otlozheniy Kazakhstana i prilgayushchikh chastey Zapadno-Sibirskoy nizmennosti)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, 1958, Nr 10, pp 72 - 85 (USSR)

ABSTRACT: The author stresses the importance of determining the connection between the fossilized flora and the layers of rocks formed during different periods of the Cenozoic era. The study of spores and pollen found in Cenozoic strata of Kazakhstan and West Siberia showed the evolution of climatic conditions in that region from sub-tropical in Paleocene-Eocene time to temperate during the present time. The following geologists and paleontologists are mentioned for their contributions to this study: A.L. Yanshin /Ref. 28/; K.V. Nikiforova /Ref. 21/; N.K. Ovechkin /Ref. 22/; V.V. Lavrov /Ref. 19/; Ye.P. Boytsova /Ref. 5, 6/; S.B. Shatskiy /Ref. 25/; V.S. Kornilova /Ref. 15, 16/; L.N. Rzhannikova /Ref. 23/; L.Yu. Budantsev /Ref. 8, 9/;

Card 1/2

SOV-11-58-10-6/12

The Principles of Paleofloristic Methods of Stratification of the Cenozoic Deposits of Kazakhstan and Adjacent Parts of the West Siberian Lowland

A.G. Kovalevskaya [Ref. 14]; G.A. Baluyeva [Ref. 1]; A.N. Krishtofovich; V.P. Grichuk; V.I. Baranov [Ref. 2,3]; V. Sukhov [Ref. 24]; M.G. Gorbunov [Ref. 10,11]; A.A. Larishchev [Ref. 20]. There are 12 maps, 2 tables, 2 diagrams and 29 references, 27 of which are Soviet, 1 Polish and 1 German.

SUBMITTED: August 7, 1957

ASSOCIATION: Geologicheskii Institut AN SSSR, Moskva (The Geological Institute of AS USSR, Moscow)

1. Geology--USSR 2. Paleoecology--Analysis 3. Geological time
--Determination

Card 2/2

FIN'KO, V.I.; ZAKLINSKAYA, Ye.D.

Stratigraphy of loose sediments in the Zeya-Bureya Plain. Izv. AN
SSSR. Ser. geol. 23 no.2:25-43 P '58. (MIRA 11:5)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralologii
i geokhimii AN SSSR i Geologicheskii institut AN SSSR, Moskva.
(Zeya-Bureya Plain--Geology, Stratigraphic)

ZAKLINSKAYA, Ye.D.

Paleogene flora in the Kara-Tau. Biul.MOIP.Otd.geol. 35 no.2:
102-115 Mr-Ap '60. (MIRA 14:4)
(Kara-Tau--Palynology)

ZAKLINSKAYA, Ye.D.

Significance of angiosperm pollen for upper Cretaceous and
Paleogene stratigraphy. Dokl.AN SSSR 133 no.2:431-434
Jl '60. (MIRA 13:7)

1. Geologicheskiy institut Akademii nauk SSSR. Predstavleno
akademikom V.N.Sukachevym.
(Palynology) (Paleobotany, Stratigraphic)

[illegible]

KORENEVA, Yelena Vasil'yevna; ZAKLINSKAYA, Ye.D., otv.red.; PEYVE,
A.V., glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.;
TIMOFEYEV, P.P., red.

[Spores and pollen from the bottom sediments in the western
part of the Pacific Ocean.] Spory i pyl'tsa iz donnykh
otlozhenii zapadnoi chasti Tikhogo okeana. Moskva, Izd-vo
"Nauka," 1964. 87 p. (Akademiia nauk SSSR. Biologicheskii
institut. Trudy, no. 109) (MIRA 17:6)

1. Chlen-korrespondent AN SSSR (for Peyve).

L 46730-66 EWT(1) GW

ACC NR: AP6019459

(N)

SOURCE CODE: UR/0384/66/000/001/0056/0064

AUTHOR: Zaklinskaya, Ye. D. (Candidate of geologico-mineralogical sciences); Udintsev, G. B. (Candidate of geographical sciences)

ORG: none

25
B

TITLE: The Indian Ocean under the keel of the Vityaz' ✓

SOURCE: Zemlya i Vselennaya, no. 1, 1966, 56-64

TOPIC TAGS: oceanographic ship, oceanographic expedition, upper mantle

ABSTRACT: Research conducted by the oceanographic vessel Vityaz' in the Indian Ocean starting in October 1964 is described. The research, carried out in connection with the International Indian Ocean Expedition, was aimed at the study of the upper mantle of the earth. The most significant aspect of the voyage is described as the gathering of new data on the structure of the rift zone in the Central Indian Ocean ridge and ore specimens collected in this area. The analysis of the chemical composition, physical properties and absolute age of these ore samples will do much to clarify the processes by which the earth's crust develops in the ocean. Orig. art. has: 8 photographs.

SUB CODE: 08/

SUBM DATE: none

Card 1/1 IC

SHTERENBERG, L.Ye.; ZAKLINSKAYA, Ye.D.

Distribution of Maastrichtian sediments in the northern trans-
Ural region. Biul. MOIP. Otd. geol. 39 no.1:75-87 Ja-F '64.
(MIRA 18:4)

SAFAROVA, Saniya Amrullova; ZAKLINSKAYA, Ye.D., otv. red.

[Into the depths of millennia with a microscope] S mikro-
skopom v glub' tysiacheletii. Moskva, Nauka, 1964. 55 p.
(MIRA 17:8)

ZAKLINSKAYA, Ye.D.

All-Union Palynological Conference on the Nomenclature and Taxonomy of
Fossil Spores and Pollen and Methods of Spore-Pollen Analysis. Izv. AN
SSSR.Ser.geol, 28 no.8:119-120 Ag '63. (MIRA 17:2)

GITERMAN, R.Ye.; GOLUBEVA, L.V.; ZAKLINSKAYA, Ye.D.; KORENEVA, Ye.V.;
MATVEYEVA, O.V.

Features of the vegetation cover of Kazantseva Interglacial
Siberia. Dokl. AN SSSR 152 no.4:937-940 O '63. (MIRA 16:11)

1. Geologicheskii institut AN SSSR. Predstavleno akademikom
V.N. Sukachevym.

GITERMAN, Roza Yevseyevna; ZAKLINSKAYA, Ye.D., ~~otv.~~red.; PEYVE, A.V., glavnyy red.; MARKOV, M.S., red.; MENNER, V.V., red.; TIMOFEYEV, P.P., red.; RABINOVICH, L.A., red.izd-va; DOROKHINA, I.N.; ~~tekhn.~~red.

[Stages in the development of Quaternary vegetation in Yakutia and their stratigraphic significance] Etapy razvitiia chetvertichnoi rastitel'nosti I Akutii i ikh znachenie dlia stratigrafii. Moskva, Izd-vo Akad. nauk SSSR, 1963. 191 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy, no.78). (MIRA 16:8)

1. Zaveduyushchaya laboratoriiy sporovo-pyl'tsevogo analiza Otdela chetvertichnoy geologii Geologicheskogo instituta AN SSSR (for Zaklinskaya). 2. Chlen-korrespondent AN SSSR (for Peyve). (Yakutiya—Paleobotany, Stratigraphic)

BOLKHOVITINA, N.A.; ZAKLINSKAYA, Ye.D.; ~~KARA~~-MURZA, E.N.; LYUBER, A.A.;
MARKOVA, L.G.; NAUMOVA, S.N.; POKROVSKAYA, I.M.; SAMOYLOVICH,
S.R.

Preparation of the Interdepartmental Conference on the Taxonomy
and Nomenclature of Fossil Spores and Pollen. Paleont. zhur.
no.3:130-135 '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut.
(Palynology—Congresses)

ZAKLINSKAYA, Yelena Dmitriyevna; VAKHRAMEYEV, V.A., red.; GOLUBEVA, L.V., red.;
CHEPIKOVA, I.M., red.; izd-va; KASHINA, P.S., tekhn.red.

[Angiosperm pollen and its significance for the stratigraphy of the
Upper Cretaceous and Paleogene] Pyl'tsa pokrytosemiannykh i ee znachenie
dlia obosnovaniia stratigrafii verkhnego mela i paleogena. Moskva,
Izd-vo Akad. nauk SSSR, 1963. 255 p. fold. diagrs. inserted. (Akademiia
nauk SSSR. Geologicheskii institut. Trudy no.74). (MIRA 16:10)

ZAKLINSKIY, A.B.

PHASE I BOOK EXPLICATION NOV/30/12

3(9)

Akademiya nauk SSSR. Morakoy gidrofizicheskiy institut
Pizika morya (Physics of the Sea) Moscow. Izd-vo AN SSSR, 1959.
95 p. (Series: Its: Trudy, Vol 17) Errata slip inserted.
1,400 copies printed.

Ed.: A. A. Ivanov, Doctor of Physical and Mathematical Sciences;
Ed. of Publishing House: N. D. Yashova; Tech. Ed.: I. N.
Guseva.

PURPOSE: This issue of the Institute's Transactions is intended for
oceanographers, hydrographers, and geophysicists.

COVERAGE: This collection of articles treats problems in physics
of the sea. Individual papers discuss wave and tide hydro-
dynamics, free surface perturbations, the Black Sea tsunami of
1927, and the characteristics of the vertical stability of
water masses in the ice-free Barents-Inland Seas and British area.
A paper by I. I. Stetsko proposes solving the problem of the
decreasing level of the Caspian Sea by diverting waters of the
Sea of Azov by canal through the Rimo-Murymchakaya valley.
References accompany individual articles.

Stets' I. I. The Problem of Maintaining a Constant Level
in the Caspian Sea 68

Yachimskiy, Yu. A., A. B. Zaklinskiy, and I. N. Maslennikov.
Characteristics of the Vertical Stability of Water Masses in
the Northwestern Atlantic During the Autumn and Winter Seasons 76

AVAILABLE: Library of Congress

Card 3/3

25/mb
1-28-60

3 (9)

AUTHOR:

Zaklinskiy, A. B.

SOV/50-59-9-10/16

TITLE:

Modifications in the Construction of the White Disk for
Measuring Color and Transparency of Sea Water

PERIODICAL:

Meteorologiya i gidrologiya, 1959, Nr 9, p 40 (USSR)

ABSTRACT:

During his voyage on the expeditionary ship "Mikhail Lomonosov" in the Atlantic Ocean, the author carried out some modifications in the construction of the white disk for measuring color and transparency of sea water. A 4 mm slit was made in the disk along the radius from the center to the edge. The metal tube for the rope was removed, and the falling weight of the blade was fixed in its place. The slit in the disk coincided with that of the falling weight. The disk was fitted to the wire rope about 10 m above the weight at the end of the rope. In this place, there was a mark preventing the scooping devices from sliding towards the weight at the end of the rope. This mark was in the opening of the disk weight, and prevented the disk from sliding on the rope. The disk was fixed to the wire rope by a rapid turning of the head of the falling weight, and required no preparations. The advantages of this modification are: 1) No preparation and marking of a particular line

Card 1/2

Modifications in the Construction of the White
Disk for Measuring Color and Transparency of Sea
Water

SOV/50-59-9-10/16

of bearing since the lowering of the disk is done by means of a rope winch on the wire rope, and not by hand; 2) the length of the rope loosened is determined by the counter of the rope winch, not by the number of marks lowered; 3) the disk can be lowered at an intense ship drift because the weight of 50 kg at the end of the wire rope ensures the perpendicular position of the wire rope in measuring transparency and color. There is 1 figure.

Card 2/2

VLADIMIRTSEV, Yu.A.; ZAKLINSKIY, A.B.; NAZARETSKIY, L.N.

Vertical stability of water masses in the northeastern Atlantic
in fall and winter. Trudy MGI 17:76-95 '59. (MIRA 12:10)
(Atlantic Ocean--Hydrology)